

Amendments to the Claims:

Please replace all prior versions, and listings of claims in the application with the following listing of claims.

Listing of claims

Claim 1 (currently amended): A method of determining the content in bursts to be transmitted from a base station in a mobile network on a broadcast frequency in specific timeslots of a broadcast frequency frame structure, wherein a logical channel is allocated to each timeslot, ~~characterized by~~ comprising the following steps:

[[-]] receiving information on a forthcoming burst to be transmitted[[,]] ;

[[-]] checking a current state of the logical channel allocated to the forthcoming burst[[,]] ;
and

[[-]] determining the content in the forthcoming burst depending on the current channel state, wherein a dummy burst with a base station specific training sequence is transmitted if there is no data to transmit, and if the dummy burst cannot be confused with a regular traffic burst according to the current channel state, said dummy burst having data fields containing no intelligible information to mobile terminals.

Claim 2 (currently amended): A method according to claim 1, ~~characterised in that~~ wherein a dummy burst with a base station specific training sequence is transmitted if the channel is not occupied, wherein no connected mobile terminal is listening to the channel.

Claim 3 (currently amended): A method according to claim 2, wherein:

at least two different modulation forms, including GMSK modulation, can be used for the broadcast frequency[[,]] ~~characterised in that~~ ; and

the dummy burst is a GMSK modulated dummy burst.

Claim 4 (currently amended): A method according to claim 2 [[or 3]], ~~characterised in that~~ wherein the transmitted dummy burst belongs to a dummy frame in the form of a fill frame generated at a higher layer in the network, such as a Layer 2 fill frame.

Claim 5 (currently amended): A method according to claim 1, wherein:

a single modulation form can be used for the broadcast frequency[[,]] ~~characterised in that ; and~~

a dummy burst with a common fixed bit pattern is transmitted, if the channel is occupied but there is no data to transmit.

Claim 6 (currently amended): A method according to claim 1, wherein:

at least two different modulation forms can be used for the broadcast frequency[[,]] ~~characterised in that ; and~~

a dummy burst with a base station specific training sequence is transmitted using a modulation form other than the one currently used for the allocated logical channel, if the channel is occupied but there is no data to transmit.

Claim 7 (currently amended): A method according to claim 6, wherein:

GMSK modulation and 8PSK modulation can be used for the broadcast channel[[,]] ~~characterised in that ; and~~

a GMSK modulated dummy burst is transmitted, if 8PSK modulation is currently used for the logical channel, or vice versa.

Claim 8 (currently amended): A method according to ~~any of claims 1-3, 6 and 7~~ claim 1,

~~characterised in that~~ wherein the transmitted dummy burst includes a fixed bit pattern located in the burst on at least one side of the base station specific training sequence, wherein the fixed bit pattern has, at least partly, a low cross correlation to all possible training sequences defined in the network.

Claim 9 (currently amended): A method according to ~~any of claims 1-3 and 6-8~~,

~~characterised in that~~ claim 1, wherein the transmitted dummy burst includes a fixed bit pattern located in the burst on at least one side of the base station specific training sequence, wherein the fixed bit pattern is related to that training sequence in a known manner.

Claim 10 (currently amended): A method according to claim 8 ~~or 9~~, wherein:
at least two different modulation forms can be used for the broadcast frequency[[,]]
~~characterised in that ; and~~
the fixed bit pattern is different for the different modulation forms.

Claim 11 (currently amended): A method according to ~~any of claims 1-10~~ claim 1,
~~characterised in that~~ wherein any DTX mode is disabled for logical channels not applying
frequency hopping with the broadcast frequency included in the hopping scheme, such that
regular traffic bursts are transmitted even during silent periods.

Claim 12 (currently amended): An apparatus for determining the content in bursts to be
transmitted from a base station in a mobile network on a broadcast frequency in specific
timeslots of a broadcast frequency frame structure, wherein a logical channel is allocated to
each timeslot, ~~characterised by the apparatus comprising:~~

[[-]] means for receiving information on a forthcoming burst to be transmitted[[,]] ;
[[-]] means for checking a current state of the logical channel allocated to the forthcoming
burst[[,]] ; and
[[-]] means for determining the content in the forthcoming burst depending on the current
channel state, wherein a dummy burst with a base station specific training sequence is
transmitted if there is no data to transmit, and if the dummy burst cannot be confused with a
regular traffic burst according to the current channel state, said dummy burst having data
fields containing no intelligible information to mobile terminals.

Claim 13 (currently amended): An apparatus according to claim 12, ~~characterised in that~~
wherein the burst to be transmitted is a dummy burst with a base station specific training
sequence if the channel is not occupied, wherein no connected mobile terminal is listening to
the channel.

Claim 14 (currently amended): An apparatus according to claim 13, wherein:
at least two different modulation forms, including GMSK modulation, can be used for
the broadcast frequency[[,]] ~~characterised in that ; and~~
the dummy burst is a GMSK modulated dummy burst.

Claim 15 (currently amended): An apparatus according to claim 13, ~~or 14, characterised in that~~ wherein the dummy burst to be transmitted belongs to a dummy frame in the form of a fill frame generated at a higher layer in the network, such as a Layer 2 fill frame.

Claim 16 (currently amended): An apparatus according to claim 12, wherein:
a single modulation form can be used for the broadcast frequency[[,]] ~~characterised in that ; and~~
the burst to be transmitted is a dummy burst with a common fixed bit pattern, if the channel is occupied but there is no data to transmit.

Claim 17 (currently amended): An apparatus according to claim 12, wherein:
at least two different modulation forms can be used for the broadcast frequency[[,]] ~~characterised in that ; and~~
the burst to be transmitted is a dummy burst with a base station specific training sequence using a modulation form other than the one currently used for the allocated logical channel, if the channel is occupied but there is no data to transmit.

Claim 18 (currently amended): An apparatus according to claim 17, wherein:
GMSK modulation and 8PSK modulation can be used for the broadcast channel[[,]] ~~characterised in that ; and~~
the burst to be transmitted is a GMSK modulated dummy burst, if 8PSK modulation is currently used for the logical channel, or vice versa.

Claim 19 (currently amended): An apparatus according to ~~any of claims 12-14, 17 and 18~~ claim 12, ~~characterised in that~~ wherein the burst to be transmitted is a dummy burst including a fixed bit pattern located in the burst on at least one side of the base station specific training sequence, wherein the fixed bit pattern has, at least partly, a low cross correlation to all possible training sequences defined in the network.

Claim 20 (currently amended): An apparatus according to ~~any of claims 12-14, and 17-19~~ claim 12, ~~characterised in that~~ wherein the burst to be transmitted is a dummy burst

including a fixed bit pattern located in the burst on at least one side of the base station specific training sequence, wherein the fixed bit pattern is related to that training sequence in a known manner.

Claim 21 (currently amended): An apparatus according to ~~any of claims 12-20~~ claim 12, wherein:

at least two different modulation forms can be used for the broadcast frequency[[,]]

~~characterised in that ; and~~

the fixed bit pattern is different for the different modulation forms.

Claim 22 (currently amended): An apparatus according to ~~any of claim 12-21~~ claim 12, ~~characterised by comprising~~ means for disabling any DTX mode for logical channels not applying frequency hopping with the broadcast frequency included in the hopping scheme, such that regular traffic bursts are transmitted even during silent periods.

Claim 23 (currently amended): An apparatus according to ~~any of claims 12-22~~ claim 12, wherein the apparatus is located in a base station and/or in a network node controlling plural base stations.

Claim 24 (currently amended): A computer program product directly loadable into the internal memory of at least one computer, including software code means for performing the method according to ~~any of claims 1-11~~ claim 1.

Claim 25 (currently amended): A computer program product stored on a computer usable medium, including readable program for causing at least one computer to perform the method according to ~~any of claims 1-11~~ claim 1.